

General Data Transfer Information

This chapter covers the following topics:

- Natural Data Transfer
 - What can be Transferred?
 - Supported File Formats
 - Supported Field Formats
 - Aborting Data Transfer
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Natural Data Transfer

You can transfer data between Natural applications on host systems and your PC. Data is compressed before being transferred to or from the host. Fewer buffers are thus transferred and the transfer is faster.

Your Natural administrator has to define the data transfer in the Natural parameter module (in the section where the work files and the printers are defined). If you display the work file definition using the Natural command `SYSFILE WORK`, the work files listed as PC are set for data transfer with Entire Screen Builder.

Before you can use any data transfer function, you must tell Natural that you are an Entire Screen Builder user. This is required only once per session. However, if your system administrator has set the parameter `PC=ON` in the Natural parameter module on the host, no further steps are required.

To tell Natural that you are an Entire Screen Builder user

- Set the parameter `PC=ON` when invoking Natural.

Or:

Enter the following Natural terminal command in any unprotected input field:

```
%+
```

Note:

The above Natural terminal command can also be sent to the host using the `TypeString` method in a script file. See the *Script Files* documentation for further information.

What can be Transferred?

Download

You can download the following from a host:

- Data into a PC data format
- Data in report form retaining the report format
- Data directly to a printer

See also: *Supported File Formats*.

Note:

The `DOWNLOAD` `COMMAND` statement is only supported with the `SET` command as described in section *Specifying a File Name Using the SET Command*. All other uses of the `DOWNLOAD` `COMMAND` statement are not supported.

Upload

You can upload the following to a host:

- Data from a PC data format
- Binary data (for example, executable programs)
- Text data with printable characters

See also: *Supported File Formats*.

Field Formats

You can upload and download fields in the following formats:

- Alphanumeric
- Binary
- Decimal
- Floating point
- Integer
- Logical
- Packed

See also: *Supported Field Formats*.

Supported File Formats

You can download data directly to and upload directly from files in any of the data formats supported by Entire Screen Builder. The format is determined by the extension of the file to be downloaded or uploaded and the format of the record in the Natural download statement.

The following formats are supported:

| Format | Extension |
|-------------------------|--|
| ASCII | <p><i>*.ncd</i> or any other extension not included in this table (for example, <i>*.txt</i>).</p> <p>When records are downloaded to ASCII format, trailing blanks at the end of downloaded records are removed. If you want to keep trailing blanks, you must specify this in the data transfer properties for the required host session. See <i>Host Sessions</i> in Entire Screen Builder's <i>System Management Hub</i> documentation for further information.</p> |
| Basic | <i>*.prn</i> |
| Binary | Any binary file with any extension. The transfer format for Natural is a record with a single binary field. |
| dBase III | <p><i>*.dbf</i></p> <p>You can download field names as column labels to dBase files. However, you cannot upload column labels.</p> |
| Data Interchange Format | <i>*.dif</i> |
| HTML | <i>*.htm</i> and <i>*.html</i> . This is a specific HTML format that can also be opened with Microsoft Excel (starting with Excel 2000). |
| IBM-compatible COBOL | <i>*.ncc</i> |
| XML | <i>*.xml</i> |

Supported Field Formats

The following formats are supported:

| Format | Description |
|-------------|---|
| A x | Alphanumeric format where x is a digit between 1 and 253. |
| A y | Alphanumeric format where y is a digit greater than 253. Can only be used with file formats ASCII and COBOL. The maximum value which can be specified depends on your Natural version. See the Natural documentation for further information. |
| B x | Binary format where x is a digit between 1 and 126. |
| B y | Binary format where y is a digit greater than 126. Can only be used with file formats ASCII, binary and COBOL. The maximum value which can be specified depends on your Natural version. See the Natural documentation for further information. |
| F4 | Floating point format with 4 bytes. |
| F8 | Floating point format with 8 bytes. |
| I x | Integer format where x is 1, 2 or 4. |
| L | Logical format (true or false). |
| N x .0 | Numeric format where x is a digit between 1 and 29. |
| N x . y | Decimal format where x is a digit between 1 and 29. y must be less than or equal to 7. The sum of x and y must not be greater than 29. |
| P x .0 | Packed format where x is a digit between 1 and 29. |
| P x . y | Packed decimal format where x is a digit between 1 and 29. y must be less than or equal to 7. The sum of x and y must not be greater than 29. |

For further information on field formats, see the Natural documentation.

Aborting Data Transfer

You can abort the current upload or download of data. This is useful, for example, if you notice that you are downloading the wrong file.

▶ To abort data transfer with one of the GUI viewers

- Choose the **Cancel** button in the data transfer toolbar.

This toolbar is only shown during the upload or download of data. For example:



Note:

The data transfer toolbar is only shown when it has been enabled in the **View** menu. See also *Data Transfer Toolbar* in the *GUI Viewers* documentation.

▶ To abort data transfer with the Terminal Viewer

- From the **Utilities** menu, choose **Cancel Transfer**.

Or:

Choose the following toolbar button:



▶ To abort data transfer with the XML Version

- Choose the **Cancel** button in the browser window.